

## ABSTRACT OF THE DISCLOSURE

A process for producing an  $\text{SiO}_2$  shaped body which is at least partially vitrified, wherein an amorphous, porous  $\text{SiO}_2$  green body is sintered or vitrified by contactless heating by means of radiation, while avoiding contamination to the  $\text{SiO}_2$  shaped body with foreign atoms, wherein the radiation used is the beam  
5 of a laser at a subatmospheric pressure below 1000 mbar.